

SENATE COMMITTEE ON INSTITUTIONS

DAM SAFETY AND HYDROLOGY PROJECTS

VERMONT DEC DAM SAFETY PROGRAM

April 18, 2023

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"The mission of the Vermont Dam Safety Program is to reduce risks to life, property, and the environment from dam incidents and dam failure through effective communication, education, regulation, and dam ownership"



Lake Groton Dam



East Barre Dam

Responsibilities:
Dam Regulation
Dam Ownership

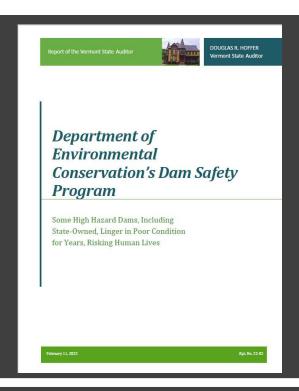
Statute/Rules:
10 VSA Chapter 43 Dams
Non-Federal, Non-Power
Rules in development (July 24')

Dam Ownership: 14 dams (DEC) *ANR dams* Current Staffing:

(2) Licensed Engineers

(2) Staff Engineers
Env. Analyst Vacant
Summer Temp (as allowed)







Lowell Lake Dam

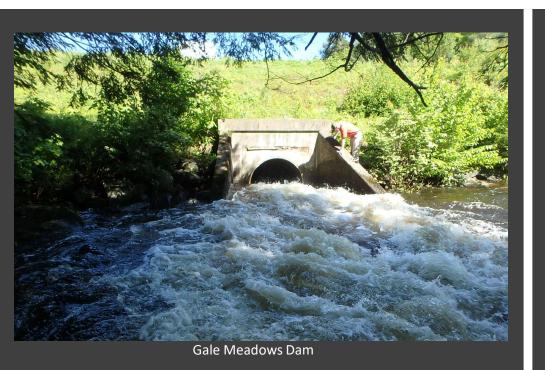
<u>AUDIT</u>

- Adopt Rules
- Improve Dam Inventory
- Improve Inspection Procedures
- Assess staffing levels

VERMONT

UNMET NEED

- ~30% ANR-owned Dams in POOR/UNSATISFACTORY Condition
- ~80% are more than 50-years old
- Rough estimate in 2021, \$25M to rehabilitate ANR owned dams
- Upcoming dam safety rules/compliance





Noyes Pond Dam

ANR Dam Risk Assessment

- Includes 18 ANR Dams, HIGH and SIGNIFICANT Hazard Potential
- Provide risk ranking of 18 dams
- Allow for project prioritization to most effectively "buy-down" risk/allocate limited funds
- Under contract for \$445,000, to be completed by 12/31/2023



Portfolio Dam Risk Assessment for Select State of Vermont - ANR-owned HIGH and SIGNIFICANT Hazard Potential Dams

The objective of the risk assessment project is to better understand the vulnerabilities and consequences of these dams while also comparing their relative risk such that a defensible risk priority list can be developed. The risk priority list will be used for allocating current and future assessment and rehabilitation funds to most effectively reduce or "buy down" the ANR's dam risk profile. The following eighteen (18) dams are included:

Dam Name	Owner	Location (Town)	Hazard Class	Height (ft)	Length (ft)	Storage (acre-ft)	Туре	Purpose
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East Barre Dam	DEC	Barre Town	HIGH	65	1,630	23,550	Earth Emb.	Flood Control
Wrightsville Dam	DEC	Middlesex	HIGH	115	1,525	36,000	Earth Emb.	Flood Control/Recreation/Hydro
Sweet Pond Dam	FPR	Guilford	HIGH	20	80	216	Conc/Stone	Recreation
Lake Sadawga Dam	DFW	Whitingham	HIGH	19	455	1,939	Earth Emb	Recreation
Lake Sadawga West Dike	DFW	Whitingham	HIGH	10	280	1,500	Earth Emb	Recreation
Lowell Lake Dam	FPR	Londonderry	HIGH	16	225	1,475	Earth Emb	Recreation
Crystal Lake Dam	DEC	Barton	SIGN	17	65	6,740	Conc/Stone	Recreation
Glen Lake Dam	FPR	Castleton	SIGN	14	270	1,735	Conc/Gravity	Recreation
Knapp Brook Site No. 1 Dam	DFW	Cavendish	SIGN	23	400	292	Earth Emb	Recreation
Knapp Brook Site No. 2 Dam	DFW	Cavendish	SIGN	27	540	623	Earth Emb	Recreation
Miles Pond Dam	DEC	Concord	SIGN	23	250	2,200	Conc/Earth Emb	Recreation
Weatherhead Hollow Pond Dam	DFW	Guilford	SIGN	17	340	320	Earth Emb	Recreation
Lake Hortonia Dam	DFW	Hubbardton	SIGN	16	150	4,500	Conc/Gravity	Recreation
Gale Meadows Dam	DFW	Londonderry	SIGN	30	300	2,942	Earth Emb	Recreation
McIntosh Pond Dam	DFW	Royalton	SIGN	25	485	300	Earth Emb	Recreation
Colton Pond Dam	DFW	Killington	SIGN	19	140	330	Earth Emb	Recreation
Kent Pond	DFW	Killington	SIGN	30	1,450	1,160	Earth Emb	Recreation
Adams Reservoir	FPR	Woodford	SIGN	21	200	453	Earth Emb	Recreation



